

IN THE CLAIMS

Please amend Claims 1, 22, 31, 37, 40 and 52 as indicated.

1. (Currently Amended) A video surveillance system comprising:
at least one video camera; and
at least one motion detector comprising:
a lens, and
an imager for receiving an image through said lens and converting said image to raw video data,
said motion detector being configured to:
receive raw video data including a first video frame and a next video frame;
analyze said raw video data to detect changes from a first video frame to a next video frame the first video frame and the next video frame to determine differences in the next video frame with respect to the first video frame;
determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;
when the next video frame is different than the first video frame;
determine multiple detection areas in the next video frame, the multiple detection areas corresponding to the differences in the next video frame;
sequence between views corresponding to the multiple detection areas having the presence of changes; and
provide a plurality of sequenced detector output signals to the at least one video camera, each of the plurality of sequenced detector output signals corresponding to each of an associated one of said changed objects the multiple detection areas.
2. (Original) A system according to claim 1, wherein said video camera comprises a dome-type camera.
3. (Previously Presented) A system according to claim 1, wherein said lens has a field of view fixedly directed to an area of interest.

4. (Original) A system according to claim 1, wherein said motion detector is fixedly mounted to said video camera.

5. (Original) A system according to claim 1, wherein said imager comprises a CCD imager.

6. (Previously Presented) A system according to claim 1, wherein one of said plurality of sequenced detector output signals causes the at least one video camera to zoom in one of the multiple detection areas.

7. (Previously Presented) A system according to claim 1, wherein said motion detector lens is also used by said video camera to capture video images from said multiple detection areas.

8. (Original) A system according to claim 7, wherein said motion detector further comprises a controller for receiving an output of said motion detect sequencer, said controller being configured to provide said detector output.

9. (Original) A system according to claim 1, wherein said at least one operating characteristic comprises a pan, tilt or zoom characteristic of said video camera.

10. (Original) A system according to claim 1, wherein said detector output is provided to modify a pan, tilt and zoom characteristic of said video camera.

11. Cancelled.

12. (Original) A system according to claim 1, said system comprising a plurality of said motion detectors.

13. (Original) A system according to claim 12, wherein said video data associated with each of said motion detectors is time multiplexed.

14. (Original) A system according to claim 12, wherein said field of view of at least two of said motion detectors overlap.

15. (Original) A system according to claim 12, wherein said field of view of each of said motion detectors overlap.

16. (Previously Presented) A system according to claim 12, wherein said motion detectors are configured in a circular pattern around said video camera.

17. (Previously Presented) A system according to claim 12, wherein said fields of view of said motion detectors extend 360 degrees around said video camera.

18. (Original) A system according to claim 12, wherein said motion detectors are affixed to an annular ring.

19. (Previously Presented) A system according to claim 18, wherein said annular ring is disposed around said video camera.

20. (Previously Presented) A system according to claim 1, said system further comprising a user control interface coupled to said video camera for controlling said video camera in response to user-initiated input.

21. (Original) A system according to claim 1, wherein said imager comprises a low resolution imager.

22. (Currently Amended) A video surveillance system comprising:
at least one video camera;

at least one motion detector comprising:
a wide-angle lens having a field of view fixedly directed to an area of interest,
and
an imager for receiving an image through said lens and converting said image to raw video data;
said motion detector being configured to:
receive raw video data including a first video frame and a next video frame;
~~analyze said raw video data to detect changes from a first video frame to a next video frame~~ the first video frame and the next video frame to determine differences in the next video frame with respect to the first video frame;
~~determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;~~
when the next video frame is different than the first video frame;
determine multiple detection areas in the next video frame, the multiple detection areas corresponding to the differences in the next video frame;
sequence between views corresponding to the multiple detection areas ~~having the presence of changes;~~ and
provide a plurality of sequenced detector output signals to the at least one video camera, ~~each of~~ the plurality of sequenced detector output signals corresponding to ~~each of~~ an ~~changed~~ object an associated one of the multiple detection areas.

23. (Original) A system according to claim 22, wherein said video camera comprises a dome-type camera.

24. (Original) A system according to claim 22, wherein said motion detector is fixedly mounted to said video camera.

25. (Original) A system according to claim 22, wherein said imager comprises a CCD imager.

26. (Previously Presented) A system according to claim 22, wherein one of said plurality of sequenced detector output signals causes the at least one video camera to zoom in one of the multiple detection areas.

27. (Original) A system according to claim 22, wherein said motion detector further comprises a motion detection sequencer configured for monitoring said video data for said movement of said object.

28. (Original) A system according to claim 27, wherein said motion detector further comprises a controller for receiving an output of said motion detect sequencer, said controller being configured to provide said detector output.

29. (Previously Presented) A system according to claim 22, wherein said system further comprising a user control interface coupled to said video camera for controlling said video camera in response to user-initiated input.

30. (Original) A system according to claim 22, wherein said imager comprises a low resolution imager.

31. (Currently Amended) A motion detector comprising:
a lens, and
an imager for receiving an image through said lens and converting said image to raw video data,

said motion detector being configured to:

receive raw video data including a first video frame and a next video frame;

analyze said raw video data to detect changes from a first video frame to a next video frame the first video frame and the next video frame to determine differences in the next video frame with respect to the first video frame;

determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;

when the next video frame is different than the first video frame;

determine multiple detection areas in the next video frame, the multiple detection areas corresponding to the differences in the next video frame;

sequence between views corresponding to the multiple detection areas having the presence of changes; and

provide a plurality of sequenced detector output signals corresponding to each of an associated one of said changed objects each of the plurality of sequenced detector output signals corresponding to an associated one of the multiple detection areas.

32. (Original) A motion detector according to claim 31, wherein said lens comprises a wide-angle lens.

33. (Original) A motion detector according to claim 31, wherein said imager comprises a CCD imager.

34. (Previously Presented) A motion detector according to claim 31, wherein one of said plurality of sequenced detector output signals causes the motion detector to zoom in one of the multiple detection areas.

35. (Original) A motion detector according to claim 31, wherein said motion detector further comprises a motion detect sequencer configured for monitoring said video data for said movement of said object.

36. (Original) A motion detector according to claim 35, wherein said motion detector further comprises a controller for receiving an output of said motion detect sequencer, said controller being configured to provide said detector output.

37. (Currently Amended) A motion detector according to claim 31, wherein said at least one operating characteristic of the plurality of sequenced detector output signals comprises a pan, tilt or zoom characteristic of said video camera.

38. (Original) A motion detector according to claim 31, wherein said detector output is provided to modify a pan, tilt and zoom characteristic of said video camera.

39. (Original) A motion detector according to claim 31, wherein said imager comprises a low resolution imager.

40. (Currently Amended) A method of monitoring a moving object in a video system, said method comprising:

providing at least one motion detector, said motion detector comprising:

a lens having a field of view fixedly directed to an area of interest, and

an imager for receiving an image through said lens and converting said image to raw video data;

operating said motion detector to:

receive raw video data including a first video frame and a next video frame;

analyze said raw video data to detect changes from a first video frame to a next video frame the first video frame and the next video frame to determine differences in the next video frame with respect to the first video frame;

determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;

when the next video frame is different than the first video frame;

determine multiple detection areas in the next video frame, the multiple detection areas corresponding to the differences in the next video frame;

sequence between views corresponding to the multiple detection areas having the presence of changes; and

provide a plurality of sequenced detector output signals corresponding to each of an associated one of said changed objects, each of the plurality of sequenced detector output signals corresponding to an associated one of the multiple detection areas.

41. (Previously Presented) A method according to claim 40, wherein one of said plurality of sequenced detector output signals causes the motion detector to zoom in one of the multiple detection areas.

42. Cancelled.

43. (Original) A method according to claim 40, said method comprising providing a plurality of said motion detectors, each of said motion detectors being configured to monitor an associated stream of said video data.

44. (Original) A method according to claim 43, wherein said video data associated with each of said motion detectors is time multiplexed.

45. (Original) A method according to claim 43, wherein said field of view of at least two of said motion detectors overlap.

46. (Original) A method according to claim 43, wherein said field of view of each of said motion detectors overlap.

47. (Previously Presented) A method according to claim 43, wherein said motion detectors are configured in a circular pattern around said video camera.

48. (Previously Presented) A method according to claim 43, wherein said fields of view of said motion detectors extend 360 degrees around said video camera.

49. (Original) A method according to claim 43, wherein said motion detectors are affixed to an annular ring.

50. (Previously Presented) A method according to claim 49, wherein said annular ring is disposed around said video camera.

51. (Original) A method according to claim 40, wherein said imager comprises a low resolution imager.

52. (Currently Amended) A method of monitoring multiple moving objects in a video system, said method comprising:

providing at least one motion detector, said motion detector comprising:

a lens having a field of view fixedly directed to an area of interest, and

an imager for receiving an image through said lens and converting said image to raw video data;

operating said motion detector to:

receive raw video data including a first video frame and a next video frame;

analyze said raw video data to detect changes from a first video frame to a next video frame the first video frame and the next video frame to determine differences in the next video frame with respect to the first video frame;

determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;

when the next video frame is different than the first video frame;

determine multiple detection areas in the next video frame, the multiple detection areas corresponding to the differences in the next video frame;

sequence between views corresponding to the multiple detection areas having the presence of changes; and

provide a plurality of sequenced signals corresponding to each of an associated one of said changed objects, each of the plurality of sequenced detector output signals corresponding to each of an associated one of the multiple detection areas.

53. (Previously Presented) A method according to claim 52, wherein one of said plurality of sequenced detector output signals causes the motion detector to zoom in one of the multiple detection areas.

54. (Previously Presented) A method according to claim 53, wherein said motion detector is configured to provide at least one record command to record video of each of said moving objects while said at least one video camera is targeted thereon.

55. (Original) A method according to claim 52, wherein said lens comprises a wide-angle lens.